

Recover Protected Species Strategic Planning Team

FY 2003-2007 Initiative Preparation Guidance

March 26, 2001

**National Oceanic and Atmospheric Administration
DEPARTMENT OF COMMERCE**

Recover Protected Species FY 2003 Initiatives (\$ x millions)			
	Positions	FY02 proposed	FY 03
Marine Mammal Conservation and Assessment		4.0	2.0
Marine Turtle Conservation		3.0	2.0
Other Species Conservation		1.5	2.0
Meeting Regulatory Requirements		-	2.0
NOAA Salmon Habitat Restoration		-	1.5 ¹
Ocean Exploration		-	0.5
Galveston Laboratory Renovation		-	1.0
Total			11.6
Pacific Salmon Recovery ²		-	

Funding sources and Priorities:

1. NMFS - \$10.0 M

- \$ \$1.0 million for construction at Galveston**
- \$ Stock assessments**
- \$ Sea turtle recovery**
- \$ Improve recovery efforts for other non-salmon species**
- \$ Meet NEPA and regulatory requirements**

2. NESDIS - \$0.1 M

- \$ Ocean remote Sensing Program-Applications to Protected Species - support the expansion of ocean remote sensing capabilities to include applications in support of endangered species.**

¹ Will require additional funding proposed from NMFS - SHC

² Proposal development is authorized, but Pacific salmon recovery is not currently identified as an FY03 priority for submission to DOC

3. NOS - \$1.0 M

\$ Using NOAA's full authorities to restore critical habitat for Pacific salmon.

RPS FY 2003-06 Initiatives - Proposal Format (3-5 Pages); Overheads 2-3 pages

Recovery of Endangered Large Whales

1. *Desired Outcome:* What will funding of this initiative accomplish? What problem are we solving?

We will improve stock assessments and modernize data collection to determine whether some large whale stocks have recovered. The accomplishments will be three-fold: a) determine whether we have successfully recovered more large whale populations to comply with our mandates under the Endangered Species Act and the Marine Mammal Protection Act and to meet our RPS performance measures; b) address the overwhelming calls by the public for environmental conservation of marine species; and c) remove unnecessary regulatory burdens on industry, researchers, and the public and more effectively focus recovery actions and funds. The problems or information gaps we will address include population structure, abundance, migratory patterns, and habitat needs (through DNA analysis; ship, aerial, and acoustic assessments; and satellite technologies including Coast Watch).

Why is this important? One of the major marine conservation success stories over the last 30 years has been the recovery of the gray whale - it was taken off the Endangered Species List in 1993. This 03 initiative has the potential to create new conservation success stories in the next few years by scientifically confirming whether more large whale populations, such as humpbacks, sperm, fin, bowhead, and blue whales, have recovered enough to be taken off the Endangered Species List.

The agency has never received adequate funding to collect the stock assessment information we need to estimate abundance of the large whales for which we are responsible (Kammer report). This 03 initiative will provide minimum start-up funding to gather this information for an important subset of large whales.

2. *Brief Description of Initiative:* Provide a concise description of the problem/issue and its impacts or benefits to RPS resources.

There are currently X-number of populations of large whales listed as Endangered, Threatened, or Depleted under the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA). In 30 years of the Endangered Species Act, only 1 large whale has been delisted (i.e., taken off the Endangered Species List) because it was deemed recovered. We believe a number of additional large whale stocks may have also recovered, but we are missing some important scientific information to confirm this. If we are right, the importance and benefit of making such a determination will be significant (*see accomplishments in 1*). If these stocks have not yet recovered, our accomplishments will still be significant because we will have improved stock assessments and improved our understanding of recovery needs, and enabled the agency to detect changes in the status of large whales to avoid and prevent long-term irreversible detrimental changes in these populations. In either case we would continue to monitor and protect these stocks as required under the MMPA.

With the exception of Bowhead, Western Gray Whales, and North Atlantic and North Pacific Right Whales, there are no protected resources program funds focused on assessing the status of large whales relative to their recovery under the MMPA and ESA. Basic information, such as current abundance estimates and trends (*how many whales are there today and are their populations increasing or decreasing?*) and population structure (*how many discrete stocks are there and how many males, females and juveniles in each stock?*) to make a determination on recovery is lacking. But that information can be obtained with some relatively small, focused, investments.

This initiative will benefit RPS resources because it will establish a funding base to determine the current status of recovery of populations of large whales, and to initiate innovative sampling and analysis methods that will provide information on whale populations' status and trends over the long-term. Because large whales do not recognize geographic boundaries, this initiative will include assessment of stocks in domestic and international waters. We would begin in 03 with a modest program that focuses on populations for which we have some promising information such as North Pacific humpbacks, North Atlantic humpbacks, fin whales, bowheads and west coast blue whales. In the outyears we would expand the number of stocks.

3. What needs to be done by NOAA? What activities should NOAA do to implement this initiative. What is NOAA doing now? What are the near and long-term priorities for NOAA's planned actions?

What we do now - NOAA Fisheries' regional Science Centers are responsible for conducting assessment surveys for the approximately 150 marine mammal stocks for which we are responsible. However, since the agency has received only a fraction of the funds necessary to pay for this responsibility, the marine mammal program has had to focus its effort on a handful of the most controversial stocks. As a result, status and trend information for most large whale stocks is extremely out of date. **Current status of large whale assessments =**

What activities should we do -

1. Stock Assessment - There are four key approaches we will take to assess large whale stocks. These methods will vary between species.

For coastally distributed stocks we will focus on **Photographic Identification** and **Aerial Photogrammetry**. These are widely used and successful methods to document the presence of individual whales and groups of whales. Low altitude high-resolution photographic techniques allow individual and groups of whales to be photographed with great precision, and provide unique data sets that may not be obtained with any other traditional survey technique. Such data may serve as the basis of individual identification, density and abundance estimates, evidence of movements and range limits, monitoring population structure and for habitat information.

For larger and more remote populations we will focus on **Aerial and Ship Based Surveys**. Aircraft and ship surveys are the traditional means to survey marine mammal populations and are essential to estimating population abundance. The cost of ship and air time has

become increasingly expensive, making it extremely difficult to get enough time in the air or on the water to get adequate population estimates. Each day at sea costs \$10,000. **The costs for air time are** Ships and aircraft have to be reserved months in advance of a survey cruise - because of weather and other factors there is no guarantee that animals will be sighted during the times the ship or aircraft have been reserved. This initiative will support adequate aerial and ship based surveys for population estimation. In addition, in the outyears we will use a combination of assessment methods to better define the seasonal and spatial distribution of large whales, and therefore optimize survey efforts.

For the rarest species and most remote locations we will focus on the use of **Passive Acoustic Methods**. In partnership with the Navy and OAR and academia, NOAA Fisheries has begun to develop programs to integrate passive acoustic methods into its marine mammal assessment programs. These methods provide biological information on unprecedented spatial and temporal scales. Acoustic systems are providing information on the seasonal occurrence, spatial distribution and movement of whale species as they migrate through specific regions and habitats, along with information on the prevailing levels of natural and anthropogenic noise found in habitats utilized by whales; expanding the detection range of large cetaceans beyond the limits of visual observers, and allowing data gathering during periods of poor or limited visibility. This initiative would augment existing acoustic surveys and add new ones as well as in the outyears develop improved sampling and analytical methods.

2. Stock Structure

Genetic profiling is essential for evaluating whale population status and estimating risk from incidental mortality and other anthropogenic threats. Genetic profiling of whale populations and other histo-chemical analyses are fundamental components of long term stock structure and contaminant evaluations. This initiative would include expanding tissue analysis to understand genetics, health, diet, and habitat preference.

Satellite Tagging Technology has made rapid and impressive contributions to the study of large whales in recent years. State-of-the-art tags can provide sophisticated ecological data which will eventually expand our capabilities to predict where large whales will occur. Such information will revolutionize large whale conservation and recovery. However, we need additional funds to modernize NOAA Fisheries satellite tagging technology. Satellite tags are now relatively small, electronically efficient, and may remain attached to whales for up to several months. This initiative in the near term will help us expand our use of satellite tags while monitoring the health of tagged animals. In the outyears we would focus on improving the transmission life, prolonging the attachment, and increasing the data acquisition capabilities as well as expanding our capabilities in predictive modeling.

Near term priorities are 4 stocks - North Pacific humpbacks, North Atlantic humpbacks, fin whales, bowheads and west coast blue whales.

Long-term priorities - other endangered large whale stocks; advanced technologies for more effective assessment

4. Who are NOAA's partners in this effort and what are we and they currently doing, and

will they do? Identify current and planned Federal, state and private partners and the results they've achieved or plan to achieve.

Current partnerships include: the Department of the Interior's Minerals Management Service Environmental Studies Program, the U.S. Fish and Wildlife Service, the National Park Service, and U.S. Geological Service (Biological Resources Division); the Department of the Navy's Office of the Chief of Naval Operations and Office of Naval Research; NOAA's Sanctuary Program, NOAA Research Pacific Marine Environmental Laboratory and Atlantic Meteorological and Oceanographic Laboratory; Fisheries Management Councils, State agencies, Colleges and Universities, and local environmental and conservation organizations. This initiative would strengthen and expand these partnerships. In addition, many whale populations range widely over the territorial seas of neighboring nations to the U.S. and its territories. Research and conservation for these highly migratory populations require collaboration and cooperation with foreign governments and recognized international conservation authorities (i.e., the International Whaling Commission, CITES).

5. What will it cost? What are we currently spending? What is current base funding for this initiative? Where is it? What is requested in the FY02 budget proposal (also considered base)? What is the year one ('03) cost (increase over current base funding. What are outyear cost increases – from FY04-07. Specify any personnel and other supporting cost needs. In addition, dedicate appropriate costs to international aspects of conservation, outreach and education, and data management. Build the initiative in incremental blocks for year 1 and for outyears. What are the “must have” components of the proposal, e.g., personnel, equipment, etc, and what might be contained in successive pieces

Base funding for Bowhead, Western Gray Whales, and North Atlantic and North Pacific Right Whales = \$\$;

Base funding for general marine mammal stock assessments and the portion roughly that goes to large whales = \$\$

Year one cost - 2Million; 04 through 07 would be additional 2M per year.

Supporting costs?

How much would go to international? 10%?

Must haves in year one:

6. How will we know if we succeed? What results will we see after one year of the proposed funding increase? How will this be different from results of current program funding? How will we measure our success or failure? Use attached framework to identify measurable performance metrics to be accomplished with proposed funding.

We will measure our success in year one by determining whether 1- 4 stocks of large whales have successfully recovered. This meets the RPS performance goal of reducing the probability of extinction of endangered, threatened and candidate species ESUs and increasing the probability that depleted marine mammal stocks will exceed the lower level of optimal sustainable populations.

Under the current program we have no idea whether certain large whales have recovered.

7. *Additional Materials* - In addition to the proposal, develop talking points and graphics to support the initiative proposal to NOAA and subsequent reviewers in 2-3 overheads/slides. Outline/summary must contain, funding requested, FTEs, summary of the problem, the solution proposed in the initiative, and the results that will be achieved (format to be provided).

FY 2003-07 Funding Initiative - Performance Measurement Framework					
Objectives	1.Prevent Extinction			2. Maintain healthy species	
Performance Measures “By the year 2007...”	Reduce the probability of extinction of _ endangered, _ threatened and _ candidate species ESUs and increase the probability the _ depleted marine mammal stocks will exceed the lower level of optimal sustainable populations	The mortality of strategic marine mammal stocks incidental to commercial fishing will be at insignificant levels		Maintain the status of those marine mammals whose population size is within OSP”	M
Milestones	Improve the status of protected species	Reduce the number and risks of incidental and direct takes (lethal and sub-lethal)	Mitigate the harmful impacts of natural phenomena	Minimize conflicts between fishing operations and marine mammals	M
Activities to Accomplish Performance Measures (activities)	Assess status of species Assess the risk of extinction Make listing decisions Develop recovery plans	Develop regulations and policies Evaluate impacts of human activities Perform consultations Enforce regulations Form partnerships/coops	Evaluate natural influences and fluctuations Conduct research on ecosystem structure and function	Develop and implement technologies to reduce conflicts	M